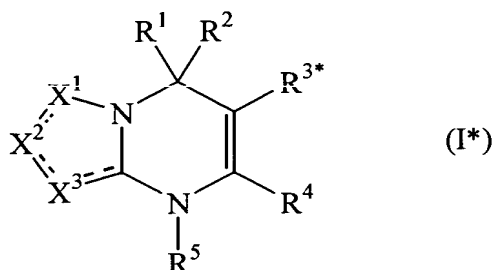


CLAIM AMENDMENTS

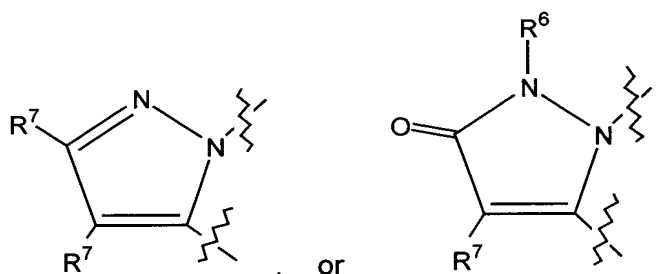
1-54. (Canceled)

55. A compound of the formula I*



enantiomers, diastereomers and pharmaceutically acceptable salts thereof, wherein

X¹, X² and X³, together with the atoms to which they are bonded, form a ring selected from:



R¹, R², R⁵, R⁶ and R⁷ are independently selected from groups of the formula -(CH₂)_n-(Z¹)_m-(CH₂)_p-Z²;

R⁴ is alkyl or substituted alkyl;

Z¹ is -CZ³Z⁴-, -O-, -NZ³-, -S-, -SO-, -SO₂-, -C(O)-, -C(O)Z³-, -C(O)NZ⁴-, -C(S)-, -C(=NOZ³)-, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z² is hydrogen; -OZ⁵-, -OC(O)Z⁵-, -NZ⁵-C(O)-Z⁶-, -NZ⁵-CO₂-Z⁶-, -NZ⁵(C=O)-NZ⁶Z⁷-, -NZ⁵Z⁶-, -NO₂-, halo-, -CN-, -C(O)Z⁵-, -CO₂Z⁵-, -C(S)Z⁵-, -(C=NOZ⁵)Z⁶-, -C(O)NZ⁵Z⁶-, -C(S)NZ⁵Z⁶-, -SZ⁵-, -SOZ⁵-, -SO₂Z⁵-, -SO₂NZ⁵Z⁶-, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO^2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

m is an integer selected from 0 or 1; and

q is an integer selected from 1 to 3.

56. (New) A compound of claim 20 wherein

R^{3*} is heterocyclo; substituted heterocyclo; $-C(O)NZ^{5*}Z^{6*}$, $-C(O)Z^{3*}-C(O)NZ^5Z^6$, $-C(O)Z^{3*}-CO_2Z^5$, $-C(O)Z^{3*}-(aryl)$, $-C(O)Z^{3*}-(substituted\ aryl)$, $-C(O)Z^{3*}-(heterocyclo)$, or $-C(O)Z^{3*}-(substituted\ heterocyclo)$.

57. (New) A compound of claim 21 wherein

R^1 is H; and

R^2 is aryl, substituted aryl, heterocyclo, substituted heterocyclo, carbocyclo or substituted carbocyclo.

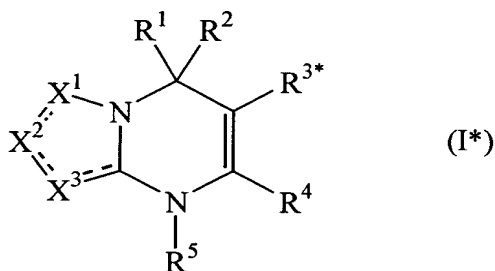
58. (New) A compound of claim 20 wherein R^{3*} is heterocyclo or substituted heterocyclo.

59. (New) A compound of claim 23 wherein

R^1 is H; and

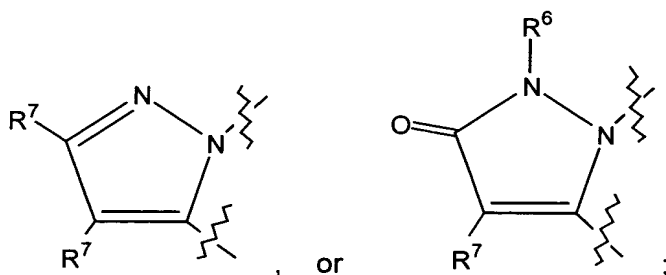
R^2 is aryl, substituted aryl, heterocyclo, substituted heterocyclo, carbocyclo or substituted carbocyclo.

60. (New) A method of treating atrial arrhythmias comprising administering to a patient in need thereof an effective amount of at least one compound of formula I



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X^1 , X^2 and X^3 , together with the atoms to which they are bonded, form a ring selected from:



R^1 , R^2 , R^5 , R^6 and R^7 are independently selected from groups of the formula $-(CH_2)_n-(Z^1)_m-$
 $(CH_2)_p-Z^2$;

R^4 is alkyl or substituted alkyl;

Z^1 is $-CZ^3Z^4-$, $-O-$, $-NZ^3-$, $-S-$, $-SO-$, $-SO_2-$, $-C(O)-$, $-C(O)Z^3-$, $-C(O)NZ^4$, $-C(S)-$, $-C(=NOZ^3)-$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^2 is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

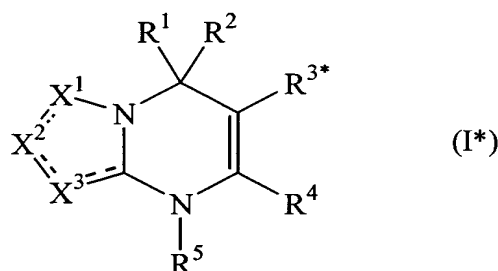
m is an integer selected from 0 or 1; and

q is an integer selected from 1 to 3.

61. (New) A method of claim 1 wherein the atrial arrhythmia is atrial fibrillation.

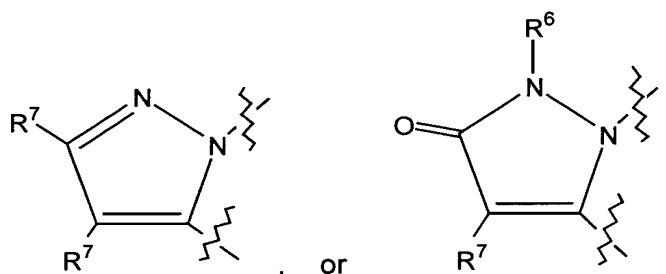
62. (New) A method of claim 1 wherein the atrial arrhythmia is atrial flutter.

63. (New) A method of controlling heart rate comprising administering to a patient in need thereof an effective amount of at least one compound of formula I



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X¹, X² and X³, together with the atoms to which they are bonded, form a ring selected from:



R¹, R², R⁵, R⁶ and R⁷ are independently selected from groups of the formula -(CH₂)_n-(Z¹)_m-(CH₂)_p-Z²;

R⁴ is alkyl or substituted alkyl;

Z¹ is -CZ³Z⁴-, -O-, -NZ³-, -S-, -SO-, -SO₂-, -C(O)-, -C(O)Z³-, -C(O)NZ⁴-, -C(S)-, -C(=NOZ³)-, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^2 is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

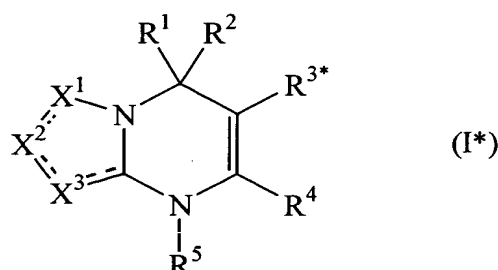
or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

m is an integer selected from 0 or 1; and

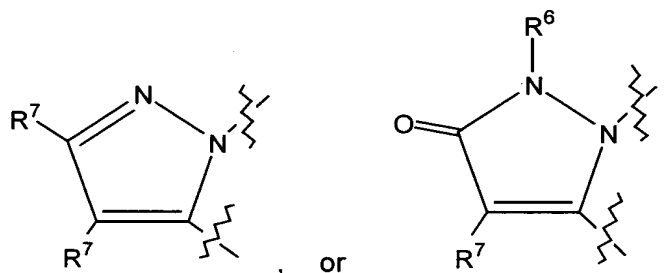
q is an integer selected from 1 to 3.

64. (New) A method of treating gastrointestinal disorders comprising administering to a patient in need thereof an effective amount of at least one compound of formula I



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X¹, X² and X³, together with the atoms to which they are bonded, form a ring selected from:



R¹, R², R⁵, R⁶ and R⁷ are independently selected from groups of the formula $-(CH_2)_n-(Z^1)_m-$
 $(CH_2)_p-Z^2$;

R⁴ is alkyl or substituted alkyl;

Z¹ is $-CZ^3Z^4-$, $-O-$, $-NZ^3-$, $-S-$, $-SO-$, $-SO_2-$, $-C(O)-$, $-C(O)Z^3-$, $-C(O)NZ^4$, $-C(S)-$, $-C(=NOZ^3)-$,
 alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl,
 carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted
 heterocyclo;

Z² is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$,
 $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$,
 $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, alkyl, substituted alkyl, alkenyl, substituted alkenyl,
 alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl,
 heterocyclo, or substituted heterocyclo;

Z³, Z⁴, Z⁵, Z⁶ and Z⁷ are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl,
 substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo,
 aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO^2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

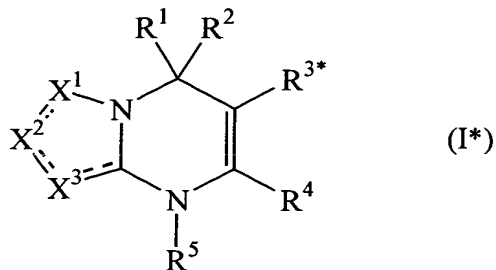
m is an integer selected from 0 or 1; and

q is an integer selected from 1 to 3.

65. (New) The method of claim 6 wherein the gastrointestinal disorder is reflux esophagitis.

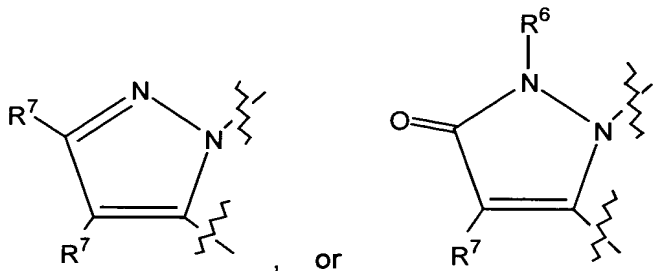
66. (New) The method of claim 6 wherein the gastrointestinal disorder is motility disorders.

67. (New) A method of treating inflammatory or immunological disease comprising administering to a patient in need thereof an effective amount of at least one compound of formula I*



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X^1 , X^2 and X^3 , together with the atoms to which they are bonded, form a ring selected from:



R^1 , R^2 , R^5 , R^6 and R^7 are independently selected from groups of the formula $-(CH_2)_n-(Z^1)_m-(CH_2)_p-Z^2$;

R^4 is alkyl or substituted alkyl;

Z^1 is $-CZ^3Z^4-$, $-O-$, $-NZ^3-$, $-S-$, $-SO-$, $-SO_2-$, $-C(O)-$, $-C(O)Z^3-$, $-C(O)NZ^4$, $-C(S)-$, $-C(=NOZ^3)-$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^2 is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

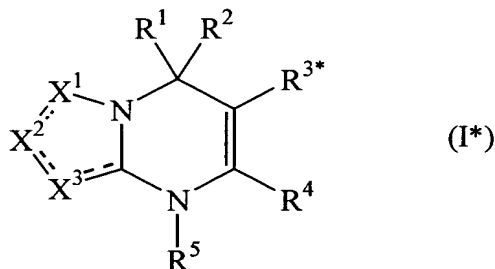
n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

m is an integer selected from 0 or 1; and

q is an integer selected from 1 to 3.

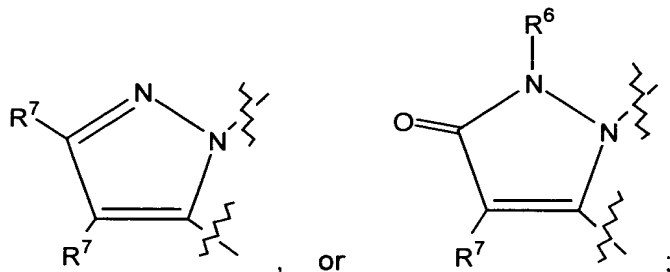
68. (New) The method of claim 67 wherein the disease is chronic obstructive pulmonary disease.

69. (New) A method of treating diabetes comprising administering to a person in need thereof an effective amount of at least one compound of formula I*



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X¹, X² and X³, together with the atoms to which they are bonded, form a ring selected from:



R¹, R², R⁵, R⁶ and R⁷ are independently selected from groups of the formula $-(CH_2)_n-(Z^1)_m-(CH_2)_p-Z^2$;

R⁴ is alkyl or substituted alkyl;

Z¹ is $-CZ^3Z^4-$, $-O-$, $-NZ^3-$, $-S-$, $-SO-$, $-SO_2-$, $-C(O)-$, $-C(O)Z^3-$, $-C(O)NZ^4$, $-C(S)-$, $-C(=NOZ^3)-$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z² is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z³, Z⁴, Z⁵, Z⁶ and Z⁷ are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z³, Z⁴, Z⁵, Z⁶ and Z⁷ may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

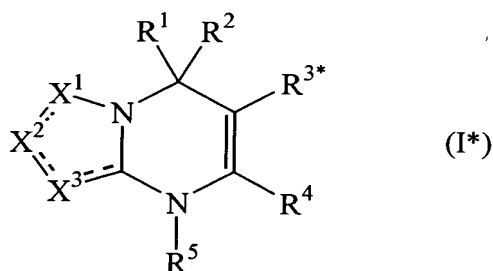
Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl; or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

m is an integer selected from 0 or 1; and

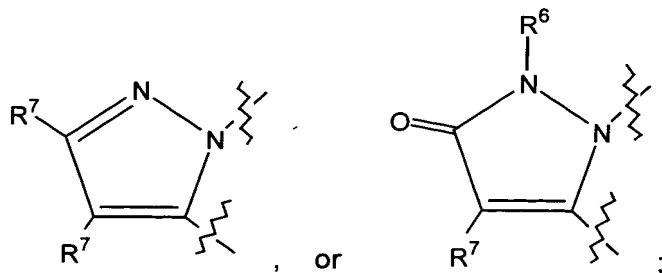
q is an integer selected from 1 to 3.

70. (New) A method of treating cognitive disorders comprising administering to a patient in need thereof an effective amount of at least one compound of formula I*



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X^1 , X^2 and X^3 , together with the atoms to which they are bonded, form a ring selected from:



R^1 , R^2 , R^5 , R^6 and R^7 are independently selected from groups of the formula $-(CH_2)_n-(Z^1)_m-(CH_2)_p-Z^2$;

R^4 is alkyl or substituted alkyl;

Z^1 is $-CZ^3Z^4-$, $-O-$, $-NZ^3-$, $-S-$, $-SO-$, $-SO_2-$, $-C(O)-$, $-C(O)Z^3-$, $-C(O)NZ^4$, $-C(S)-$, $-C(=NOZ^3)-$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^2 is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not

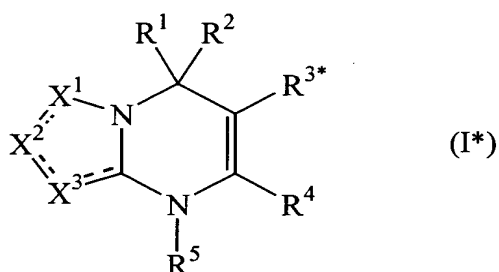
together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

m is an integer selected from 0 or 1; and

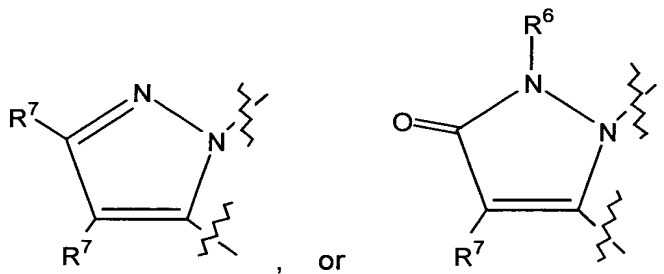
q is an integer selected from 1 to 3.

71. (New) A method of treating migraine comprising administering to a patient in need thereof an effective amount of at least one compound of the formula I*



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X¹, X² and X³, together with the atoms to which they are bonded, form a ring selected from:



R¹, R², R⁵, R⁶ and R⁷ are independently selected from groups of the formula $-(CH_2)_n-(Z^1)_m-(CH_2)_p-Z^2$;

R⁴ is alkyl or substituted alkyl;

Z¹ is $-CZ^3Z^4-$, $-O-$, $-NZ^3-$, $-S-$, $-SO-$, $-SO_2-$, $-C(O)-$, $-C(O)Z^3-$, $-C(O)NZ^4$, $-C(S)-$, $-C(=NOZ^3)-$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z² is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$,

-SZ⁵, -SOZ⁵, -SO₂Z⁵, -SO₂NZ⁵Z⁶, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z³, Z⁴, Z⁵, Z⁶ and Z⁷ are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z³, Z⁴, Z⁵, Z⁶ and Z⁷ may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is -OZ⁵, -OC(O)-Z⁵, -NZ⁵-C(O)₂-Z⁶, -NZ⁵(C=O)-NZ⁶Z⁷, -NZ⁵Z⁶, -(C=NOZ⁵)Z⁶, -C(O)NZ^{5*}Z^{6*}, -C(S)NZ^{5*}Z^{6*}, -SZ⁵, -SOZ⁵, -SO₂Z⁵, -SO₂NZ⁵Z⁶, -C(O)Z^{3*}-Z^{2*}, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

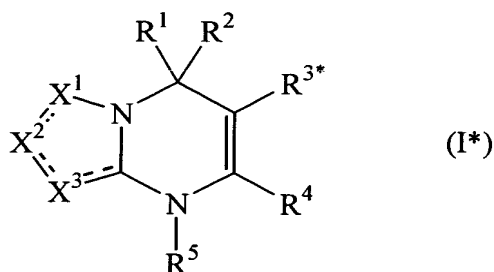
or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

m is an integer selected from 0 or 1; and

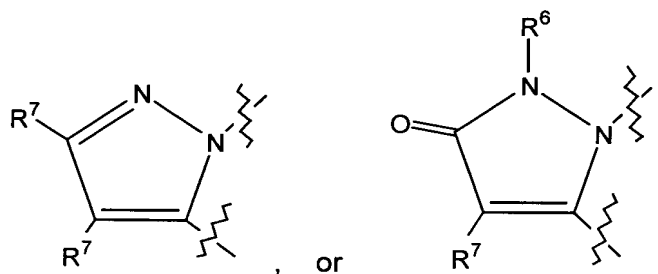
q is an integer selected from 1 to 3.

72. (New) A method of treating epilepsy comprising administering to a patient in need thereof an effective amount of at least one compound of the formula I*



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X¹, X² and X³, together with the atoms to which they are bonded, form a ring selected from:



R¹, R², R⁵, R⁶ and R⁷ are independently selected from groups of the formula $-(CH_2)_n-(Z^1)_m-(CH_2)_p-Z^2$;

R⁴ is alkyl or substituted alkyl;

Z¹ is $-CZ^3Z^4-$, $-O-$, $-NZ^3-$, $-S-$, $-SO-$, $-SO_2-$, $-C(O)-$, $-C(O)Z^3-$, $-C(O)NZ^4$, $-C(S)-$, $-C(=NOZ^3)-$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z² is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$, $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo;

Z³, Z⁴, Z⁵, Z⁶ and Z⁷ are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z^3 , Z^4 , Z^5 , Z^6 and Z^7 may, in one or more pairs of two, together with the atoms to which they are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO^2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted heterocyclo;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

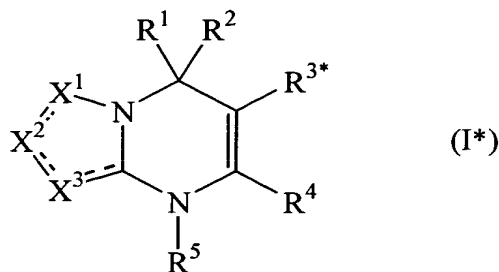
or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is also 0;

m is an integer selected from 0 or 1; and

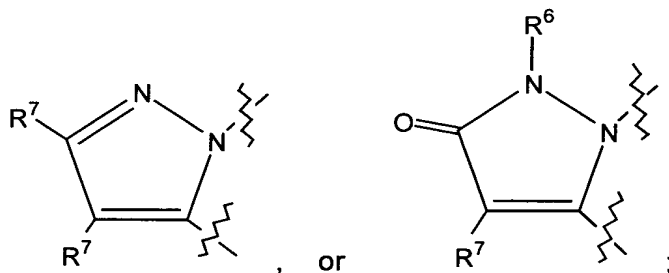
q is an integer selected from 1 to 3.

73. (New) A method of treating I_{kur} -associated conditions comprising administering to a patient in need thereof an effective amount of at least one compound of the formula I*



enantiomers, diastereomers or pharmaceutically acceptable salts thereof, wherein

X¹, X² and X³, together with the atoms to which they are bonded, form a ring selected from:



R¹, R², R⁵, R⁶ and R⁷ are independently selected from groups of the formula $-(CH_2)_n-(Z^1)_m-$
 $(CH_2)_p-Z^2$;

R⁴ is alkyl or substituted alkyl;

Z¹ is $-CZ^3Z^4-$, $-O-$, $-NZ^3-$, $-S-$, $-SO-$, $-SO_2-$, $-C(O)-$, $-C(O)Z^3-$, $-C(O)NZ^4$, $-C(S)-$, $-C(=NOZ^3)-$,
 alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl,
 carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted
 heterocyclo;

Z² is hydrogen; $-OZ^5$, $-OC(O)Z^5$, $-NZ^5-C(O)-Z^6$, $-NZ^5-CO_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$,
 $-NO_2$, halo, $-CN$, $-C(O)Z^5$, $-CO_2Z^5$, $-C(S)Z^5$, $-(C=NOZ^5)Z^6$, $-C(O)NZ^5Z^6$, $-C(S)NZ^5Z^6$,
 $-SZ^5$, $-SOZ^5$, $-SO_2Z^5$, $-SO_2NZ^5Z^6$, alkyl, substituted alkyl, alkenyl, substituted alkenyl,
 alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl,
 heterocyclo, or substituted heterocyclo;

Z³, Z⁴, Z⁵, Z⁶ and Z⁷ are independently hydrogen, halo, alkyl, substituted alkyl, alkenyl,
 substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo, substituted carbocyclo,
 aryl, substituted aryl, heterocyclo, or substituted heterocyclo; or

Z³, Z⁴, Z⁵, Z⁶ and Z⁷ may, in one or more pairs of two, together with the atoms to which they
 are bonded, form a carbocyclic, substituted carbocyclic, heterocyclic or substituted
 heterocyclic group;

R^{3*} is $-OZ^5$, $-OC(O)-Z^5$, $-NZ^5-C(O)_2-Z^6$, $-NZ^5(C=O)-NZ^6Z^7$, $-NZ^5Z^6$, $-(C=NOZ^5)Z^6$,
 $-C(O)NZ^{5*}Z^{6*}$, $-C(S)NZ^{5*}Z^{6*}$, $-SZ^5$, $-SOZ^5$, $-SO^2Z^5$, $-SO_2NZ^5Z^6$, $-C(O)Z^{3*}-Z^{2*}$, halo,
 alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl,
 carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo or substituted
 heterocylco;

Z^{2*} is other than hydrogen when Z^{3*} is heterocyclo;

Z^{3*} is heterocyclo or substituted heterocyclo;

Z^{5*} is substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, carbocyclo,
 substituted carbocyclo, aryl, substituted aryl, heterocyclo, or substituted heterocyclo; and

Z^{6*} is hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted
 alkynyl, carbocyclo, substituted carbocyclo, aryl, substituted aryl, heterocyclo, or
 substituted heterocyclo, provided that Z^{6*} is not hydrogen when Z^{5*} is unsubstituted
 cycloalkyl, unsubstituted aryl, or unsubstituted benzyl;

or Z^{5*} and Z^{6*} may together with the nitrogen atom to which they are bonded form a
 heterocyclic group or substituted heterocyclic group, provided that Z^{5*} and Z^{6*} do not
 together form unsubstituted piperidinyl, unsubstituted pyrrolidinyl, or unsubstituted
 morpholinyl;

n and p are independently selected from integers from 0 to 10 wherein, when m is 0, p is
 also 0;

m is an integer selected from 0 or 1; and

q is an integer selected from 1 to 3.